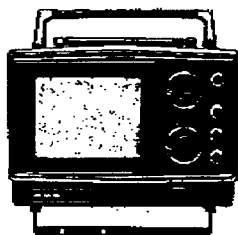


**SONY**

D:s

**TRINITRON® COLOR TV RECEIVER**

# KV-5100



## Operating instructions

To get the greatest enjoyment from your Sony Color TV, read this manual carefully before operating the set. Please retain this manual for future reference.

## OWNER'S RECORD

For your convenience, record the model number and serial number (you will find them on the rear of your set) in the space provided below. Please refer to them when you contact your Sony dealer in case of difficulty. This will be a great help to you in getting better and more satisfactory service on your set.

Model No. KV-5100

Serial No. \_\_\_\_\_

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## **WARNING**

**Dangerously high voltages are present inside the set. DO NOT OPEN THE CABINET. Refer servicing to qualified personnel only.**

**To prevent fire or shock hazard, do not expose the set to rain or moisture.**

## **CAUTION**

- Operate only on 120 V ac. For battery operation, 12 V or 24 V dc is required.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not attempt to make any of the adjustments at the small holes in the rear of the set. These are special adjustments to be performed only by qualified personnel.
- Unplug the set from the wall outlet or from the battery when it will not be used for an extended period of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- This set is equipped with a polarized AC Socket, and the supplied AC Power Cord is equipped with a polarized plug (one blade of the plug is wider than the other), which will fit into the power socket only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should the plug still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.

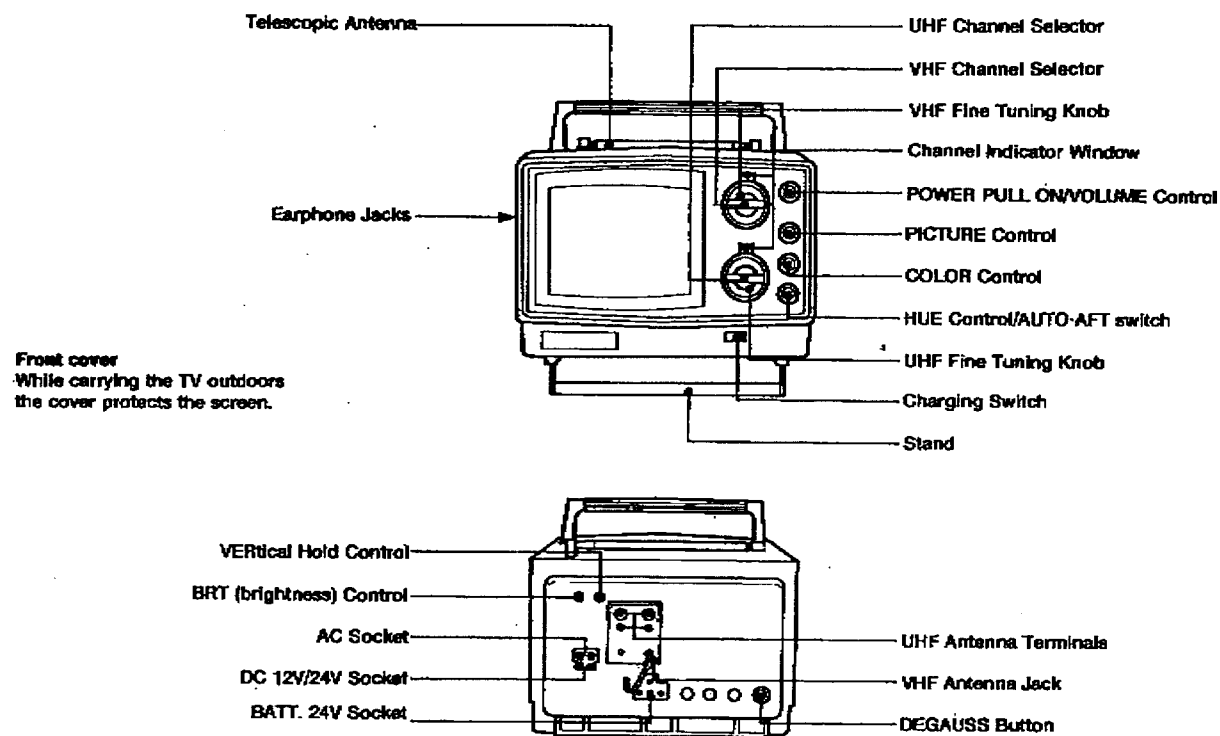
## NOTES

- Do not install the set in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set for repairs or to a new location. For maximum protection, repack your set as it was originally packed at the factory.
- To keep the set looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild soap solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet.

## FEATURES

- Advanced new automatic circuits are built into your Sony Color TV to eliminate the necessity for frequent readjustment of the tuning and color controls. A touch of the AUTO-AFT Switch instantly activates these circuits to tune your set for peak performance and locks the color processing system to factory preset values that assure realistic reproduction of every shade and tint.
- Your Sony Color TV features the unique ECONOQUICK system, which provides a picture within seconds after the set is switched on. Unlike conventional instant-picture systems, there is absolutely no power consumption when the set is not in use.

## LOCATION OF CONTROLS

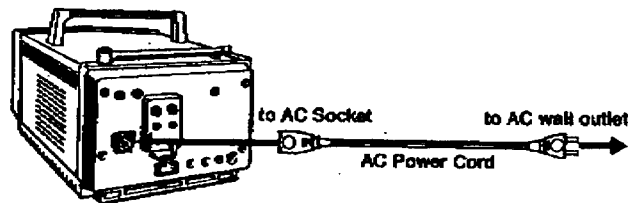


## POWER SOURCES

### House current operation

Insert the 2-hole plug of the AC Power Cord (supplied) into the AC Socket at the rear of the TV and connect the other end of the cord to a convenient wall outlet (120 V).

• When the AC Power Cord is plugged into the AC Socket, the DC power supply to the TV is automatically disconnected, even if the battery pack is connected to the TV.

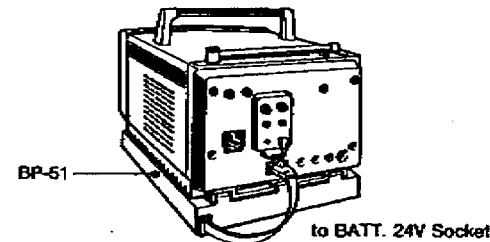


### Rechargeable battery operation

The Sony Battery Pack BP-51 (optional) is specially designed to be used with the KV-5100 and permits TV viewing any place where house current is not available.

First check that the POWER PULL ON Switch is pushed in. Then place the TV on the BP-51 so that the rear projections of the BP-51 fit into the rear holes of the TV. Secure the supplied two screws at the bottom of the BP-51. Plug the DC Power Cord of the BP-51 into the BATT.24 V Socket at the rear of the TV. Then turn on the TV.

• Make sure that the AC Power Cord is disconnected. The fully charged BP-51 permits approximately 3 hours of continuous or intermittent TV viewing. When the picture disappears and the red [START RECHARGE] lamp at the front of the BP-51 lights, the batteries are exhausted. Recharge the BP-51.

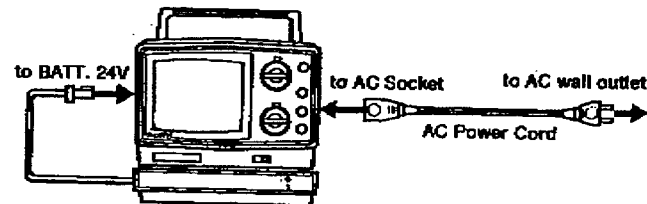


### Recharging

After each use, recharge the battery pack; complete the connections as illustrated, set the Charging Switch to [CHARGE], and turn on the TV. Recharging will then start (no picture nor sound comes on). While recharging, the green lamp lights.

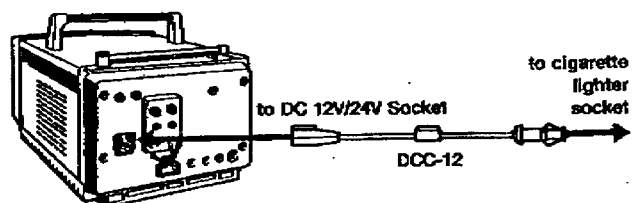
Approximately 10 hours are required for full recharging.

If you wish to view the TV while recharging, set the Charging Switch to [OPERATE].



#### Auto/boat battery operation

The KV-5100 operates on a 12 V or 24 V car/boat battery through the cigarette lighter socket of a car or boat. Connect the Sony Car Battery Cord DCC-12 (optional) as illustrated. For details, refer to the DCC-12 instructions. Car Battery Cord Adaptor DCC-5 (optional) is designed to connect the DCC-12 to the 12 V or 24 V auto/boat battery without using the cigarette lighter socket. For details, refer to the DCC-5 instructions.



## OPERATION

#### To switch on the TV

Pull the POWER PULL ON Control. The picture will appear in a few seconds. To switch off, push in this knob.

● Make sure that the Charging Switch is set to OPERATE, when both battery pack cord and AC power cord are connected to the TV, otherwise neither picture nor sound will come on.

#### To increase the sound

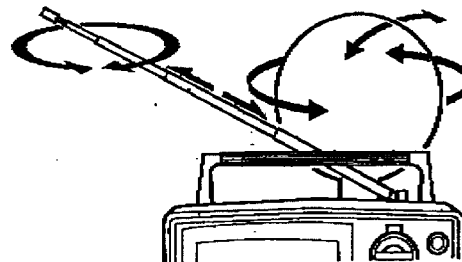
Turn the VOLUME Control clockwise ↻. To decrease, turn it counterclockwise ↻.

#### Adjust the antenna

For VHF reception, use the VHF Telescopic Antenna: adjust the length, direction and angle for the best possible picture.

For UHF reception, use the loop antenna (supplied): loosen the nuts on the UHF antenna terminals (rear) and fit the lugs to the terminals. Tighten the nuts. Swing it back and forth and/or sideways for the optimum picture.

● Make sure that the loop and telescopic antennas do not touch each other.



#### To operate in the automatic mode

Check that the AUTO-AFT Switch is depressed.

- In the automatic mode, the AFT (Automatic Fine Tuning) locks in the correct signal and secures sharper pictures on all channels.
- In the automatic mode, the color circuits also lock to preset values of hue and color to provide correct reproduction.

#### To select the desired VHF channel (2-13)

Turn the VHF Channel Selector until the desired channel number appears in the indicator window. After initial adjustment, there will normally be no need for fine tuning readjustment on the VHF channels. However, if the picture is not clear, adjust fine tuning as follows:

Push in the VHF Fine Tuning Knob and turn it clockwise until a herringbone pattern appears in the colored parts of the picture. Then turn the knob slowly counterclockwise and release it at the point where the herringbone pattern just disappears and the picture is clear. This is the correct tuning point.

- When the VHF fine tuning adjustment is made for the first time, it may be necessary to turn the Fine Tuning Knob several rotations. Subsequent corrections will require a smaller degree of adjustment.

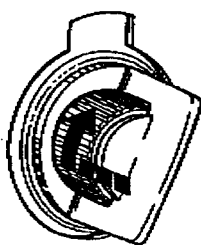
- In the automatic mode, when the VHF Fine Tuning Knob is pushed in, the AFT is disengaged in order to fine-tune the channel manually. When you release the knob, the AFT will be reactivated to maintain correct tuning.

#### To select the desired UHF channel (14-83)

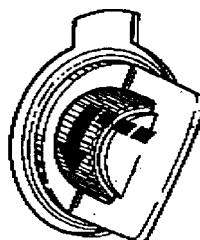
First turn the VHF Channel Selector until the letter U appears in the indicator window. Then turn the UHF Channel Selector until the desired channel number appears in the indicator window. In case of extreme interference, or of an extremely weak station, adjust the fine tuning as follows:

- Release the AUTO-AFT Switch to disengage the AFT.
- Slowly turn the UHF Fine Tuning Knob clockwise until a herringbone pattern appears in the colored parts of the picture. Then slowly turn the knob counterclockwise until the herringbone pattern just disappears and the picture is clear.
- Push in the AUTO-AFT Switch to reactivate the automatic fine tuning, or leave it released, whichever provides better reception.

**CAUTION:** The UHF Channel Selector cannot be turned directly from 83 to 14 or from 14 to 83. Do not try to force it to do so.



Herringbone pattern



Clear picture

#### To adjust brightness and contrast

Correct brightness and contrast settings are important for good color reproduction. Once the brightness has been set correctly, the contrast can be controlled with the PICTURE Control without altering color reproduction. Perform the following adjustments.

① Turn the PICTURE Control fully counterclockwise.

② Adjust the BRT (brightness) Control at the rear of the set for the desired brightness level.

③ Adjust the PICTURE Control from the lowest setting to the desired level according to your preference and room lighting conditions.

The PICTURE Control will adjust the contrast, color intensity and brightness simultaneously in the proper ratio.

#### Earphone jacks

For private listening, insert the earphone plug into the [ • ] receptacle. This disconnects the loudspeaker. The use of the [ : ] receptacle permits the earphone and the loudspeaker to be used simultaneously. TV sound may be recorded by connecting a tape recorder to the [ : ] receptacle with a suitable connecting cord. Adjust the TV volume for a normal listening level.

#### Vertical hold control

If the picture rolls vertically, adjust the VERTICAL Hold Control at the rear.

#### To adjust color and hue manually

Both COLOR and HUE Controls have a limited adjustment range in the AUTO-AFT mode. If you wish to control color reproduction manually, set the AUTO-AFT Switch to OFF, thus disengaging the automatic color mode.

Adjust the COLOR Control for the desired color intensity.



Picture becomes pale.



Picture becomes vivid.



Adjust the HUE Control for the most natural skin tones.



Skin tones become purple.



Skin tones become green.

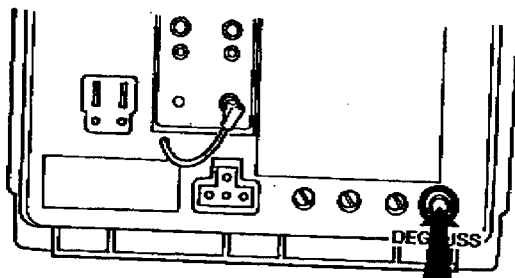


• COLOR and HUE adjustments have no effect upon black and white programs.



**DEGAUSS button**

Accidental contact or proximity to a magnetized object, such as a loudspeaker, magnetized screwdriver, scissors, or a toy which uses a magnet can magnetize the picture tube. This will cause poor color over portions of the picture. To demagnetize the picture tube, momentarily push the DEGAUSS Button at the rear of the set.

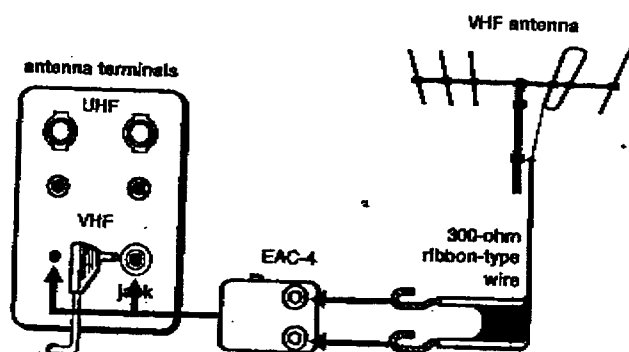


## EXTERNAL ANTENNAS

In difficult reception areas (inside a steel-frame building, in mountainous areas, or at great distances from the transmitter), the use of an external antenna will give better reception.

### VHF antenna connection

- Strip the plastic insulation from the end of the 300-ohm ribbon-type lead-in wire.
- Loosen the nuts on the terminals of the External Antenna Connector EAC-4 (supplied) and wrap the bare copper leads around the terminals.
- Tighten the nuts of the terminals.
- Remove the plug inserted into the VHF antenna jack of the TV.
- Insert the EAC-4 into the VHF antenna jack of the TV.
- Set the switch, located at the side of the EAC-4, to LOCAL when you are very near the TV station.

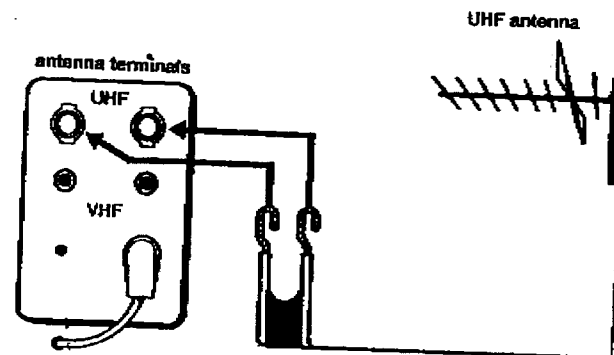


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### UHF antenna connection

Direct connection to the UHF antenna terminals can be made in the same way as explained for VHF antenna connection to the EAC-4.





The use of the EAC-12 (optional) will permit an easier connection. Coaxial cable connections to the UHF antenna terminals can be made conveniently with the EAC-13W (optional).







For optimum reception in your car or boat, the Sony Car Antenna VCA-1 or VCA-2 is recommended.

## CHECKING THE SET BY YOURSELF

Many apparent malfunctions may be caused by slight misadjustments of the regular controls or some other equally simple cause. If any difficulty arises in the operation of your set, first check through

SYMPTOM	CORRECTION
 <p>no picture (screen not lit), no sound</p>	<ul style="list-style-type: none"> <li>• Is the AC Power Cord plugged into an operative outlet?</li> <li>• If operating on the BP-51, has the AC Power Cord and the Car Battery Cord been disconnected? Check for discharged battery.</li> </ul>
 <p>no picture (screen not lit), but good sound</p>	<ul style="list-style-type: none"> <li>• Turn the BRT or PICTURE Control clockwise.</li> </ul>
 <p>good picture but no sound</p>	<ul style="list-style-type: none"> <li>• Turn the VOLUME Control clockwise.</li> <li>• Check that the earphone is disconnected from the [-] earphone jack.</li> </ul>
 <p>no picture, no sound, but snow and noise only</p>	<ul style="list-style-type: none"> <li>• Is the Telescopic Antenna adjusted properly?</li> <li>• On UHF, is the loop antenna connected and adjusted properly?</li> <li>• Check any external antenna used.</li> </ul>

this illustrated list of symptoms and corrections. Should any difficulty persist, unplug the set and contact your Sony dealer.

SYMPTOM	CORRECTION
 <p>no color</p>	<ul style="list-style-type: none"> <li>• Check that the AUTO-AFT Switch is pushed in.</li> <li>• Check that the COLOR Control is not turned fully counter-clockwise.</li> <li>• Readjust the fine tuning.</li> </ul>
 <p>no color, no picture, too indistinct, herringbone pattern, stripes, etc.</p>	<ul style="list-style-type: none"> <li>• Readjust the fine tuning.</li> </ul>
 <p>dotted lines or stripes</p>	<ul style="list-style-type: none"> <li>• Often caused by interference from autos, neon signs, hair dryers, electric razors, etc. Try adjusting the antenna for minimum interference.</li> </ul>
 <p>double images or "ghosts"</p>	<ul style="list-style-type: none"> <li>• Readjust the indoor antenna. Reflections from nearby mountains or buildings often cause this problem. In such cases, a highly directional outdoor antenna may improve the picture.</li> </ul>

## SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF Channels 2 - 13 UHF Channels 14 - 83 (70-position detent tuner)
Picture tube	Trinitron tube 5" picture measured diagonally 55-degree deflection
Antenna	VHF telescopic antenna UHF loop antenna 75-ohm external antenna jack for VHF 300-ohm external antenna terminals for UHF
Speaker	8 cm (3 1/4") dia.
Power requirements	120 V ac, 60 Hz 12 V or 24 V dc
Power consumption	34 W (max.) ac 19 W dc (24 V), 22 W (12 V) dc
Dimensions	228 x 169 x 314 mm (w/h/d) (8 7/8 x 6 5/8 x 12 1/2 inches) excl. handle
Weight	5.9kg (13 lb) excl. front cover, incl. AC Power Cord
Accessories supplied	UHF loop antenna Earphone AC Power Cord External Antenna Connector EAC-4
Optional accessories	Battery Pack BP-51 Car Battery Cord DCC-12 Car Battery Cord Adaptor DCC-5 Car Antenna VCA-1, VCA-2

Design and specifications are subject to change without notice.

Your new Sony Color TV employs the latest concept in color-image reproduction...the Trinitron System. A product of intensive engineering research, the Trinitron System ensures bright, sharp pictures and fewer service requirements. The system consists of the Trinitron Gun and "Aperture Grille". The Trinitron Gun produces the three beams that excite the primary phosphors on the screen. The beams are aimed and focussed by a unique set of electron lenses and a pair of electron prisms. Pictures stay sharp at all points on the screen because all three beams pass through the center of a large electron lens. The Aperture Grille color-selection system allows a larger amount of electrons to pass through it to provide high brightness on the screen.

